ONLINE ATTENDANCE SYSTEM FOR SCHOOL

1. Name of the Initiative:

Online Attendance System for School

2. Objective

It is understood that, if teacher and student presence generate a shared good, then teacher and student attendance will be mutually reinforcing. Controlling for the endogeneity of teacher and student attendance, the most powerful factor raising teacher attendance is the attendance of the children in the school, and the most important factor influencing child attendance is the presence of the teacher. The results suggest that one important avenue to be explored in developing policies to reduce teacher absenteeism is to focus on raising the attendance of children.

3. Coverage of the initiatives

State Level: Department, CCC

District Level: 37 District Project Offices (DPEOs-DEOs), Dist. - MIS

Block Level: 265 BRCs Cluster Level: 3247 CRCs

School Level: 54000+ Schools, 2.52+ Lacs teachers, 115+ Lacs Students

4. Description of the Initiative including innovative aspects of the solution

Samagra Shiksha (SS), Education Department, Gujarat State has implemented Online Attendance System for schools by developing a Web Portal, Mobile App & integration with SMS based mechanism. The Online Attendance system web portal fetches teachers' & students' database record available under Teacher Portal (for teachers) & Child Tracking System (for students) for capturing their attendance of respective Standard (for students) & School (for teachers). Teachers uses mobile app for capturing the attendance of students in the class. Principals uses mobile app for capturing the attendance of the students in the school. The Online attendance system is implemented in schools across the state.

The Online attendance system solution is implemented across the state as mentioned below:

- For schools with computers and internet: Roll Call based individual attendance on Portal
- ► For schools with mobile connectivity only: Integration of SMS based mechanism to the Portal
- ► For Schools with no connectivity (No mobile data / voice): Uploading attendance through Mobile App with Auto-Sync support

On daily basis, attendance of 2.52 Lakh Teachers and 115.00 Lakh Students is being taken for whole schooling system including Government, Govt. Aided and Private schools through the implemented systems as mentioned above. Capturing the daily online attendance of Teachers and Students involves following activities

- Freezing Teacher Attendance by 11:30 am
- Random Verification by daily calling from Command & Control Centre established at State level
- Calls to CRC Coordinators, actual present in schools for their school visits
- Dashboard available at District & BRC level for monitoring & verification

- Integration of Online attendance system with other MIS applications such as School monitoring application used by field visit staff during their visits to schools, school administrative system for teacher's payroll for salary generation
- Analysis of generated data to monitor the attendance behaviour of students to take corrective actions to increase the attendance

5. Date of Launch of the initiatives/ Start date of the initiative

The initiative is launched on 19.11.2018

6. Implementation details

- Baseline study of existing paper-based attendance system in coordination with different stockholders (School principle, teachers, CRCs, BRCs etc.)
- Conceptualize & Design of application including state Dashboard
- Development of Application as per the requirement
- Integration with other existing application (i.e. Child tracking system, Teacher portal, School monitoring app, CCC Dashboard etc.) to provide/get the data through dashboard
- Piloting of the application in one or two Districts
- Stakeholder Training through BISAG
- Roll Out of the application in the state
- Real time Monitoring at state through state dashboard
- Integration with Command & control centre for real-time monitoring & data validation by random calling
- Analysis of generated data to monitor the attendance behaviour of students to take corrective actions to increase the attendance
 Following are the few of the incidents derived from Online attendance system & actionable steps being taken:

Sr No	Incident	Action
01	3 days of regular absenteeism from the school	,
02	7 days of regular absenteeism from the school	Class Teacher will pay a visit to absentee student's home and encourage her/ his parents to send her/ him school regularly
03	10 days of regular absenteeism from the school	Head Teacher will pay a visit to absentee student's home and encourage her/ his parents to send her/ him school regularly
04		Chairman, School Management Committee (SMC) will pay a visit to absentee student's home and encourage her/ his parents to send her/ him school regularly
05	21 days of regular absenteeism from the school	CRC Co-Ordinator of the Cluster will pay a visit to absentee student's home and encourage her/ his parents to send her/ him school regularly
06	30 days of regular absenteeism from the school	Such an Absentee Student will be marked as 'Out of School' Student and her/ his name will be removed the Attendance Register, however Student's name will appear in School's

General Register. School Leaving Certificate (SLC) will not be	
issued until parents/ guardian of such student ask for it.	

7. Challenges faced during the deployment/implementation

There are many schools where network connectivity is not available. In result of which online submission of attendance was not possible. However, this has been eliminated by introducing a SMS based offline attendance system in those schools.

8. Outcomes/Impact of the initiative

The Key features and outcomes of the implemented solution are as under;

- Captures real time data on teachers and students' attendance
- Helps in understanding absenteeism pattern, seasonality and trends
- Identifies Irregular Teachers and Students across State
- Tracking of teachers training, deputation, leave, duties other than Education
- Helps in triangulating MDM data, VTS Data with attendance data

Key observations form the data analysis results:

- The teacher and student attendance are mutually reinforcing.
- Improvement of teachers' attendance increases students' attendance.
- With increase in student's attendance, teachers' attendance also improves significantly.
- To reduce teacher absenteeism, it is required to focus on improving the attendance of children.
- **9. Documents/media related to initiatives (**Submit any of the below as a documentary proof with short description on the same)
 - a. Testimonials
 - b. Quotes from stakeholders
 - c. Press release
 - d. Video/Audio
 - e. Photos
 - f. Others







